

FRONTIER GROUP

We Have the Power

100 Percent Renewable Energy
for a Clean, Thriving South

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We Have the Power

We must – and can – transition to 100 percent renewable energy.

Why We Must

Paris climate conference:
195 nations agree to
limit global warming to
2° C.

U.S. must reduce
greenhouse gas
emissions by at least
80% by mid-century.



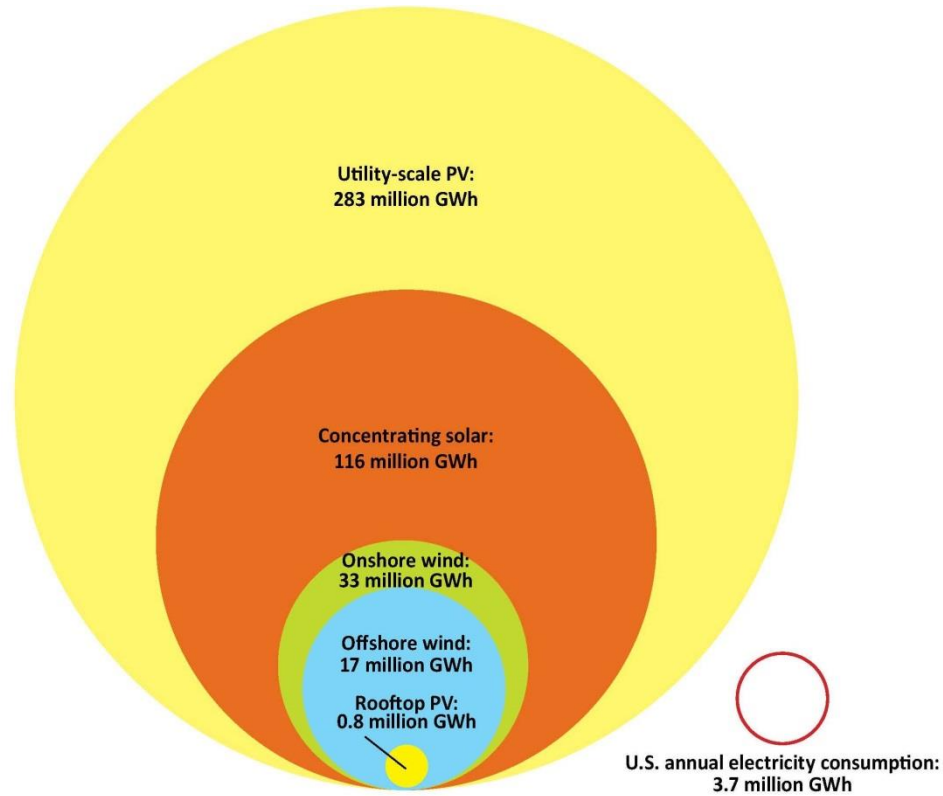
UNFCCC

Why We Must



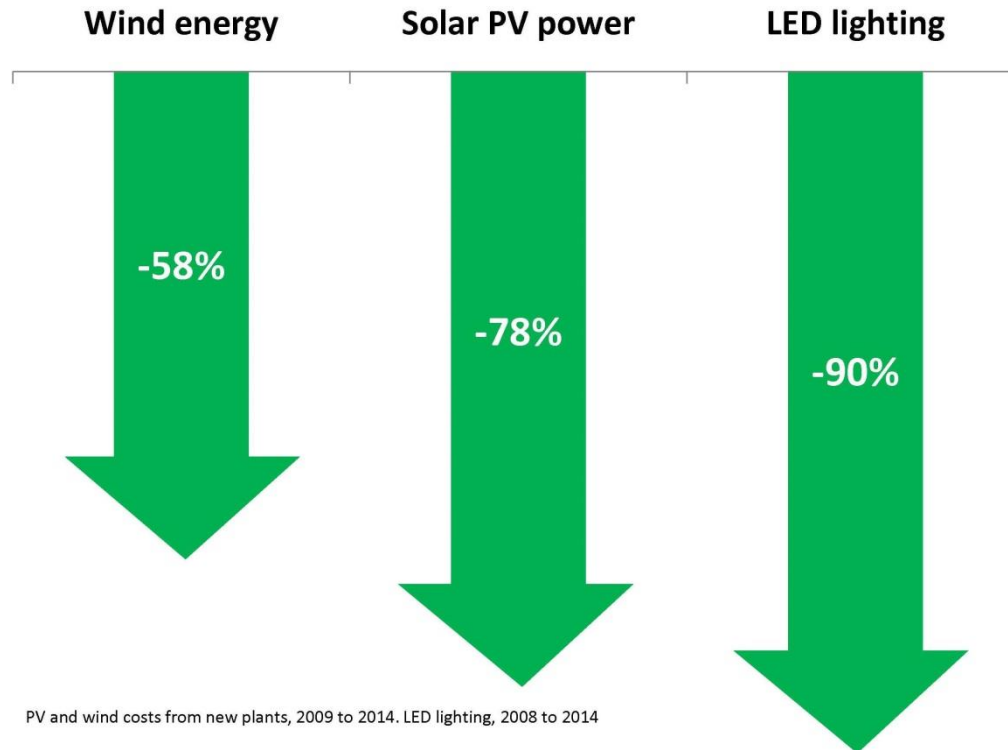
100% renewable energy transition eliminates environmental/public health damage of fossil fuels

Why We Can



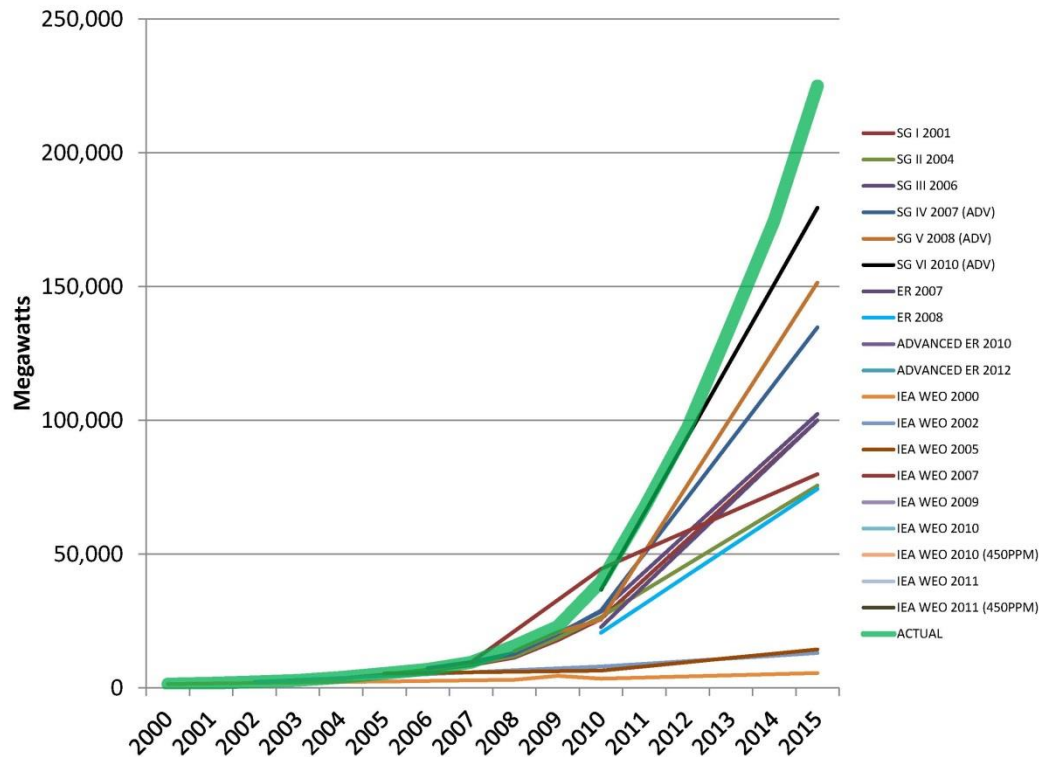
America's renewable energy potential is virtually limitless.

Why We Can



Key renewable energy technologies are improving rapidly and falling in price.

Why We Can



Solar energy has been growing faster than projected worldwide.

Why We Can

- Studies by government agencies, academics and non-profits have shown that it is feasible for the United States to shift much or all of its energy demand to renewable energy by mid-century.

Table ES-1. High Renewable Energy Scenarios for United States

| Author | Year Published | Scope | Timing | Percentage Renewable | Energy Sources Included |
|---------------------------------------------------|----------------|----------------------------|--------|---------------------------------|--------------------------------------------------------------------------------------------------|
| MacDonald, et al. ² | 2016 | Electricity, U.S. | 2030 | ~63% (low cost renewables case) | wind, solar, hydropower (plus nuclear and gas) |
| Jacobson, et al. ³ | 2015 | All energy, U.S. | 2050 | 100% | efficiency, wind, solar, geothermal, tide, wave, hydropower |
| Greenpeace ⁴ | 2015 | All energy, global | 2050 | 100% | efficiency, wind, solar, geothermal, biomass, ocean, hydropower, hydrogen, synfuels |
| Williams, et al. ⁵ | 2015 | Electricity* | 2050 | >80% (High Renewables case) | wind, solar, geothermal, hydropower |
| Budischak, et al. ⁶ | 2013 | Part of U.S. electric grid | 2030 | 100% | wind, solar, energy storage |
| National Renewable Energy Laboratory ⁷ | 2012 | Electricity | 2050 | 80% | wind, solar, geothermal, hydropower, biomass |
| WWF ⁸ | 2011 | All energy, global | 2050 | ~100% | efficiency, wind, solar, geothermal, biomass, wave & tidal (small pct. of residual fossil fuels) |

* High renewables case also included replacement of 83% of gas fuels with biomass and hydrogen and reduction in solid fossil fuels use.

We Already Are



Guiding Principles

- Maximize energy efficiency.
- Build new renewable energy facilities.
- Electrify.
- Modernize the electricity grid.
- Keep fossil fuels in the ground.

Georgia's Trajectory

2016 IRP RENEWABLES

■ Utility Solar ■ DG Solar ■ Utility Renewables ■ DG Renewables ■ Wind ■ Self Build

